

# UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/675,056	09/30/2003	Karen M. Green	5633	5839
7590 05/27/2005			EXAMINER	
Jeffery E. Bacon			PATEL, VINOD D	
Legal Departme M-495	ent		ART UNIT	PAPER NUMBER
PO Box 1926		3742		
Spartanburg, S	C 29304		DATE MAILED: 05/27/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/675,056	GREEN ET AL.			
Office Action Summary	Examiner	Art Unit			
	Vinod D. Patel	3742			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period of the period of th	36(a). In no event, however, may a reply be timy within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONEI	rely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).			
Status					
<ul> <li>1) ⊠ Responsive to communication(s) filed on <u>09 March 2005</u>.</li> <li>2a) ☐ This action is FINAL.</li> <li>2b) ☑ This action is non-final.</li> <li>3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is</li> </ul>					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4)  Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-20 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/o	vn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.	epted or b) objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date  5. Patent and Trademark Office	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:				

Art Unit: 3742

### **DETAILED OFFICE ACTION**

Page 2

#### **INTRODUCTION**

1. This application/control number 10/675,056 has been examined. Response to non final action is acknowledged. This is second action on the merits of the claimed invention. The application has claims 1-20 pending.

## **Double Patenting**

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-26 of copending Application No. 10/675,062. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims are written using different words but claimed resulting structure shown in the Figures 1-9 is same for both applications. In addition both applications discloses same specification (20 pages), same abstract (1 page) and same drawings Figures 1-9.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Application/Control Number: 10/675,056

Art Unit: 3742

# Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan (US6768086) in view of Dutt (US6174825).

Sullivan (Fig. 1-6) discloses an electrical connection of flexible conductive strands in a flexible body (20) comprising: a flexible planar body (22) having a conductive resistance pathway (24) including at least one conductive resistance flexible strand of material, and a temperature dependent variable resistance pathway (28) having at least one temperature dependent variable resistance flexible strand of material, wherein the conductive resistance pathway and the temperature dependent variable resistance pathway have different routes in the flexible planar body as shown in the Figure 3. The flexible heater according to Figure 4, the conductive resistance pathway (324) includes a plurality of conductive resistance flexible strands of material. The flexible heater according Figure 4, wherein the conductive resistance pathway (324) further includes a supply bus (302) flexible strand of material electrically connected with the conductive resistance flexible strands of material. The flexible heater according to Figure 4, wherein the conductive resistance pathway further includes a first supply bus (302) flexible strand of material and a second supply bus (304) flexible strand of material, and where in the conductive resistance (324) flexible strands of material are electrically connected in parallel between the first supply bus flexible strand of material and the second supply bus flexible strand

Application/Control Number: 10/675,056

Art Unit: 3742

of material. The flexible heater wherein the temperature dependent variable resistance flexible strand of material has a positive coefficient of temperature to resistance (Abstract). The flexible heater (warming blanket fabric) body further includes a plurality of non-conductive flexible strands of material of the flexible planar body are interlaced. The flexible heater according to the Figures 3-5, the conductive resistance pathway crosses the temperature resistance dependent variable resistance pathway in at least one crossing location, wherein the conductive resistance pathway crosses the temperature resistance dependent variable resistance pathway in about a substantially perpendicular direction. The flexible heater (warming blanket fabric) wherein the conductive resistance flexible strand of material comprises a conducting resistance yarn. The flexible heater wherein the conductive resistance pathway includes a plurality of conductive resistance yarns. The flexible heater wherein the conductive resistance pathway further includes a first and a second supply bus yarn, and where in the conductive resistance yarns are electrically connected in parallel between the first supply bus yarn and the second supply bus yarn. The flexible heater wherein the temperature dependent variable resistance flexible strand of material comprises a temperature dependent variable resistance yarn. The flexible heater wherein the temperature dependent variable resistance yarn has a positive coefficient of temperature to resistance. The flexible heater (Figure 3-5) wherein the temperature dependent variable resistance pathway further includes a first connection bus yarn and a second connection bus yarn, and wherein the temperature dependent variable resistance yarns are electrically connected in series by the first connection bus yarn and the second connection bps yarn. The flexible heater (Figure 3-5) wherein the flexible body further comprises a plurality of non-conductive yarns. The flexible heater, wherein the plurality of non-conductive yarns of the flexible planar body are

Art Unit: 3742

woven together. The flexible heater (Figure 3-5) wherein the conductive resistance pathway crosses the temperature resistance dependent variable resistance pathway in at least one crossing location, wherein the conductive resistance pathway crosses the temperature resistance dependent variable resistance pathway in about a substantially perpendicular direction.

With respect to claim 1 and 12, Sullivan does not disclose a pair of flexible locking strands of material disposed longitudinally adjacent to the flexible electrically strand of material, the locking strands of material crossing over each other on either side of a crossing conductive strand of material,

With respect to claim 11, Sullivan does not disclose a pair of flexible electrically conductive strands of material to cross each other on either side of the crossing strand of electrically conductive material.

Dutt discloses (Figure 5), a base fabric (50) woven in an endless leno weave. Base fabric (50) is woven from warp yarns (52,54) and weft yarns (56). Warp yarns (52,54) twist one around the other between picks of weft yarn (56). Warp yarns (52) remain on one side of weft yarns (56). Warp yarns (54) wrap over the other side of weft yarns (56) at each crossing point (58), but wrap under warp yarns (52) between crossing points (58) to mechanically lock the weft yarns (56) in position. This manner of weaving gives firmness and strength to an open weave and prevents slipping and displacement of the warp and weft yarns (column 6, lines 57-67, column 7, lines 1-3). Dutt also discloses (Figure 9), a base fabric (60) woven from warp yarns (62,64) to cross each other on either side of the weft yarns (64). Dutt teaches pair of yarns cross each other on either side of the weft yarns.

Application/Control Number: 10/675,056

Art Unit: 3742

With respect to claims 1 and 12, it would have been obvious to provide a pair of flexible locking strands of material disposed longitudinally adjacent to the flexible electrically strand of material, the locking strands of material crossing over each other on either side of a crossing conductive strand of material as taught by Dutt for the warming blanket of Sullivan to mechanically lock the warp and weft of yarns and to provide firmness and strength to an open weave and prevents slipping and displacement of the warp and weft yarns.

With respect to claim 11, It would have been obvious to one of ordinary skill in the art to provide a pair of flexible electrically conductive strands of material to cross each other on either side of the crossing strand of electrically conductive material as taught by Dutt for the warming blanket of Sullivan to mechanically lock the warp and weft of yarns and to provide firmness and strength to an open weave and prevents slipping and displacement of the warp and weft yarns.

### Response to Arguments

Applicant's arguments filed on 3/9/05, with respect to the rejection(s) of claim(s) 1-20 under 102 (e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found art reference Dutt (US6174825). Dutt reference teaches a pair of flexible locking strands of material disposed longitudinally adjacent to the flexible electrically strand of material, the locking strands of material crossing over each other on either side of a crossing conductive strand of material, to mechanically lock the weft yarns in position. This manner of weaving gives firmness and strength to an open weave and prevents slipping and displacement of the warp and weft yarns (column 6, lines 57-67, column 7, lines 1-3). Dutt also discloses (Figure 9), a base

Application/Control Number: 10/675,056 Page 7

Art Unit: 3742

fabric (60) woven from warp yarns (62,64) to cross each other on either side of the west yarns (64). Dutt teaches pair of yarns cross each other on either side of the west yarns.

- 6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The art should be both separately considered and considered in conjunction with the previously cited art when responding to this action. Irvin (US5134006) relates to belt reinforcing fabric and belt reinforcing with the same, Webber (US3472289) relates to heating fabric, Kochman (US6369369) relates to soft electrical textile heater.
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vinod D. Patel whose telephone number is 703-308-5227. The examiner can normally be reached on 7.30 A.M. TO 4.00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 703-305-5766. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP

Vinod Patel
Patent Examiner

Art Unit 3742

ROBIN O. EVANS PRIMARY EXAMINER